harmed through the completion of that circuit, the completion of that unterminated dark fiber, assuming for a moment that you're paid in whatever this Commission or the applicable authority deems to be the standard for cost recovery?

MR. SMITH: I'm going to have to object to the question, because -- maybe the witnesses can answer it, but in my opinion it was very convoluted. I had a hard time following it.

HEARING EXAMINER: I didn't have a hard time following it. I'll overrule the objection, and if any of the panel can answer it, please do.

MS. SHOCKETT: I don't even know how you would evaluate what would have to be done to terminate the rest of that fiber. It's a construction project that's in progress. It's planned, it's -- there have been expenditures that Verizon has put out for that particular construction project, and there's a plan to complete that project. And it's not our policy to leave these projects unterminated for years and years and years -- not unterminated, but unfinished for years and years and years, it's just a project that's in the process of being completed, and once it's completed then it's available to anybody to use.

BY MR. FREEDMAN:

Q. So, if you were paid all of your costs, whatever the standard was, to complete that termination, is there any way that Verizon is harmed by performing that?

A. (Albert) I mean, you're asking in such a broad sense, I mean, again, it's hard to give an answer to, but if we have a project that we have planned and we have been building over a period of time, like a couple of years, to extend the fiber out to a particular area and to build fiber terminations and into particular locations -- if we have planned and designed and installed and built 90 percent of that, and if then somebody comes along and has us take all of that design and use it in a totally different way that we weren't going to use for ourselves, so that we would be back to the drawing board and have to start all over again where we were a couple of years prior, I'd say that's a harm to us.

Q. What's the harm?

A. The harm is that we were midstream into a two-year construction project to build facilities and into particular locations that we had planned to build them into, and now all of a sudden we are preempted from putting those facilities into those locations and we are now taking them off to other locations we would

not have been putting them into, and we're back to the drawing board to begin from scratch again to build the facilities.

Q. But just to clarify, of course, if Verizon had a specific use for those facilities presumably, you would have reserved, those or as your term was, assigned them, so you wouldn't even have the conversation with the competitor in the first place, correct?

A. No, that's not right. You're mixing up a couple of different terminologies.

What we've been talking about is really the ongoing construction effort of building fiber-optic facilities to take them from the central office and eventually get them out and terminate them in a customer prem.

All right. That construction of the facilities occurs so that when you're done with it, at that point you can assign it, and you can use it for orders for ourselves as well as for orders for CLECs, but not until that construction is done can anybody use it or assign it or do anything with it.

So, you've got -- you can't mix and muddy assigned with the process of constructing the facilities. First you've got to build them and

complete them end to end. When that's done, then Verizon can assign them and use them for Verizon's use, as well as CLECs can order them and we can assign them for CLECs' use.

Q. Great. Thank you.

You described earlier in your sort of three-part program for providing information, I think it was, inquiries, field surveys and wire center area maps.

I wanted to ask you about those wire center area maps. Do those include the same information that the cable plats include?

A. (Shockett) No, they don't.

Q. Okay. What information is in each of those two things?

A. Well, Don Albert actually explained what's in the cable plats. I'm not familiar with those.

But as far as the wire center area maps --

Q. Uh-huh?

A. -- these are very basic drawings that give an overall high-level view of the fiber that's running in the street within a central office area. So, it's a street-level detail of where fiber is from

the central office.

Q. So, does it show -- when you say "high-level," I'm not sure what you mean.

A. It doesn't have any other information other than there is fiber running on the street.

A. (Albert) It shows the path that the fiber cable takes. So, you would see from this map that you have got a fiber cable on Main Street, but you don't have a fiber cable on Church Road.

Q. And would it tell you, for example, if there's any capacity in that fiber cable on Main Street for a competitor to utilize?

A. (Shockett) No, it does not.

(Albert) That's what the inquiry process is for, so --

Q. And is it the case where dark fiber goes beyond wire center boundaries?

A. Our interoffice facility fiber cables meet at a wire center boundary, or they continue -- maybe a better way to describe it is they continue through a wire center boundary.

So, we have fiber cables that you can think of as feeding end-user premises within a wire center, and then we also have fiber cables that go between the COs that are the interoffice facility

fibers.

Q. And with respect to that second category of fibers, do the wire center maps, wire center area maps, show those?

A. Yes, the maps will show all of the fiber cables that are within the wire center. And the reason for that is, like we were saying earlier, when you get close to the central office and you start taking a number of tree-branching, smaller fiber cables, and you get near the CO, and you start combining them into larger single sheaths, as you get near the central office, you're going to have fiber cables that are going to have both loop and higher-level in them. That's why on the map we just show all the cables.

Q. And to reiterate what may be painfully obvious, those are only terminated cables, right?

A. No.

Q. Good thing I asked the question.

A. The map shows where there is cables, and some of the fibers within those cables will be terminated at locations and some of them won't. And what you get through the inquiry process is you get an answer if at a particular location if terminated fibers exist that are complete end to end in a

finished state so that either we can use them or CLECs can use them.

Q. I see. So, I might see something on a map that will show fiber running down Main Street, but I'll only learn after I did the inquiry that it's unterminated fiber and I can't use it, correct?

A. Or you -- yes, that's correct, but in addition to that -- I mean, the map will show you there's fiber cable, but all of the fibers in there might be working. So, the inquiry process is what very specifically takes your need between one exact end point and another exact end point, and you specify how many strands of fiber that you need, and then we'll go and we'll say, yes, we have all those strands between those exact two end points or we've got some subset of what you're asking for.

Q. And do you -- and by "you" I mean Verizon institutionally -- have set steps, how quickly you get the maps, how quickly the inquiry process takes and how quickly the field survey is done?

A. (Shockett) The inquiry process is a 15-day process, 15 business days, and both the maps and the field survey are evaluated on a case-by-case basis, depending on how large the job is and, therefore, how long it will take.

So, there's no set interval on the delivery of the CO fiber map or the field survey.

Q. Thank you. Just a couple more questions, and I'm going to wrap up.

With respect to the parallel, as you describe it, provisioning process that you said you have with Cavalier, are there specific time frames associated with that process?

A. For ordering?

Q. Uh-huh.

A. Yeah. There's the standard collocation intervals, and I don't remember exactly, but there's an initial period of lead time from when we receive the collocation application until we get back then to the CLEC with an acknowledgement that there's space available as well as with, then, if it's a new collocation with a common language code.

Once at that point, then, the CLEC has that, they know there's space available that they've requested and they've got the common language code, at that point they can then submit an order for dark fiber.

So, really, maybe the name is misleading. We're talking about parallel provisioning. The best way to think about it is like an early ordering

process. It allows you to order and begin paying for fiber-optic facilities at a much sooner point than you were able to do before it existed, and that point that it previously existed was when there was a physical place we could hook our lines up to.

Q. Is this process written down anywhere, this parallel provisioning process you're describing?

A. We've got a description of it in our trial agreements with Cavalier that lay out some of the steps that we're trying to do, and we've also got an interconnection agreement with Cavalier in Pennsylvania that details there the process.

Q. And then one more question about the process.

If I heard you correctly, you accept the order for the fiber only after a common language code is assigned. Is that correct? Is that a CLLI code?

A. Yeah, because that information needs to be known to submit the order.

Q. So, if I'm going through a collocation process, I make my request for space and I go back and I get it filled out and there was something like a 90-day interval to get that, when is the CLLI code assigned? Is it after the space is completely built out and ready to move in? Is that when you get the

CLLI code?

A. No, it's right up front.

Q. It's up front?

A. Yeah. It varies by state, but it's usually within a couple of weeks.

Q. A couple of weeks of what?

A. Of the collocation application.

Q. The first request for collocation?

A. Uh-huh.

Q. Okay. Thanks.

A. Yeah, the point in the process where we get back and we say, yes, there's collocation space. That's where we'll convey there's initial information you need to include on the dark fiber order under the assumption that we've said there's the right type of collo space there that you've asked for.

Q. Okay. If somebody asks for a fiber route from point A to point Z, could it be the case that sometimes there may be more than one route to fulfill that request?

A. (Shockett) It's possible.

Q. And when Verizon gets such a request, do you respond by informing the competitor of all possible routes or of one route, or what is the response in a fact pattern where there's more than one

route?

A. If there is fiber available, we would -- if there's more than one route, we would look at the most efficient route, and if there's fiber available there, we would obviously provide it in the most efficient manner.

If there wasn't fiber there and there was an alternate route, we would look there and see if it was available, and if it was, we would give you the alternate route.

Q. So, there should never be a case where a CLEC is denied an A to Z request for dark fiber if there's an alternate route to complete that connection. Is that correct?

A. (Albert) I wouldn't go quite that far. I mean, we'll routinely look for one alternate route. If you get in a major metropolitan area, if you're up in Northern Virginia, I mean, conceivably, I mean, you could have many, many, many alternate routes, and then you could have an alternate to the alternate, and then you could have an alternate to the alternate to the alternate, and it could almost go on endlessly. When we get your specific inquiry between two points, we'll look at the most direct and also one alternate, and then usually at that point then we'll respond back.

And I don't know if I -- if the product definition is a little different than what I've seen, but...

MS. SHOCKETT: No, that's accurate.

BY MR. FREEDMAN:

Q. And if the competitor in that fact pattern wanted to review the underlying data that Verizon is reviewing in order to determine the availability or appropriateness of alternate routes, would they be permitted to do that?

A. (Shockett) In Virginia, you would only get the response on the dark fiber inquiry whether the route was available. If you wanted to look further into that and get more detail on a negative response, you could ask for a field survey to determine what the status is of that particular route and the accuracy of the dark fiber inquiry response.

Q. So, you're saying the field survey is the competitors' way to in fact review that underlying information that I described in my previous question?

A. Yes, in Virginia.

(Albert) Yeah, because the inquiry we're still answering just based on our records, and our records are not always perfect, perfect, perfect. So the field survey is a desirable next verification to

basically see if the records were correct, as well as provide additional engineering design information.

(There was a pause in the proceedings.)

BY MR. FREEDMAN: (Continuing)

Q. Would Verizon ever deploy dark fiber without the intent to complete it or terminate that dark fiber cable?

A. I would say generally no. I mean, what we put in the ground, we're assuming that at some point in time we're going to eventually be using it and terminating it and connecting it somewhere.

What we have been talking about at length this afternoon is that it is a lengthy multi-stage construction process to build fiber facilities, and, so, it can be over a period of years that we are continually adding additional fiber cables to and expanding out into our network the fiber facilities that we have available.

But our, you know, basic engineering and planning assumptions are that as we build a piece of fiber eventually, you know, within the next ten to fifteen years. At some point in that period we're going to have a need, and we're going to have a use for it.

Q. And is it the basic engineering and

planning policy at Verizon to provision that dark fiber so that it is ready to be terminated upon need and request?

A. I would say no. I would say our policy is to terminate it in the locations where it is needed. I think you're trying to get at what you were asking earlier about when something is unterminated, you know, how much more work is required, you know, to turn it into a terminated state, and I would say that construction process -- that's usually probably more in the enabled of a couple of months. Because when we have unterminated fiber, in order to then complete it to a location where we can put it in service, we're going to be talking about having to place additional fiber cable, make fiber splices, get the correct structure for the facility, be that either conduit or be that right-of-way or be that pole space.

So, when we have unterminated fiber there are quite a few construction steps, including placing additional fiber to hook up to the partially constructed fiber, you know, all that needs to occur. So, that's not quick or readily called into service. That's an ongoing construction effort that can take a couple more months to finish, or it can be a couple more years to finish it off.

Q. Or it could be a couple hours, correct?

A. No. No. That's what I was saying, is we do not run a fiber cable into a building and do everything short of connecting it to a patch panel, you know, so that there's just a two-hour little job required to hook it up. We don't build our fiber plant that way in Virginia. I mean, we'd be stupid to. I know that we've been theoretically accused of doing that so we would be hiding fiber in some way, but in reality that would be a dumb, expensive way for us to build the plant for ourselves, to do this only two hours to finish it off thing.

Q. Thank you.

MR. FREEDMAN: No further questions.

HEARING EXAMINER: Thank you.

Mr. Doggett?

MR. DOGGETT: Thank you, Your Honor. Just a couple of questions.

EXAMINATION

BY MR. DOGGETT:

Q. I believe when you were talking about the parallel provisioning trial it resulted in, it was a result of scarcity of some of the dark fiber lines being available. Is that right?

A. (Albert) Yeah, all of Verizon Virginia as well as the other Verizon network -- dark fiber or spare fiber facilities are a scarce resource, particularly in the interoffice facilities network.

Q. Is there a situation where there is an overabundance of dark fiber?

A. Well, that's always a matter of relativeness and degree, but for, you know, buildings in the outside planned loop network where we have recently and initially put in fiber-optic terminations, typically there's going to be a quantity of spare there.

Q. This is in the area of where new construction is being done?

A. Not necessarily, no. It could be -- you know, it could be a bank in downtown Richmond here and it's the first time that somebody in that building has ordered a service that's at a speed that requires fiber-optic facilities and that we've recently then terminated fiber optics into.

It's really hard to answer your overabundance question because it comes back to the ultimate engineering, it depends. We do run new office fiber-optic interoffice facility cables. When we put them in we're putting them in at least as 144

strands in Virginia for the interoffice network. If you're out in the Southwest Virginia area and the Norton area, they're going to get a little skinnier, but in Tidewater and Northern Virginia they are fairly large cables we put in for new.

When those cables are completed and when they're available for us as well as when they're available for CLECs, you have quite a few fibers in between that point in time in those particular locations.

Q. You've hit on two questions I wanted to follow up on.

That bank example you just mentioned, does that provide other people -- are you going to construct more than you need and then terminate it so that others will have fiber-optic access?

A. When we construct we'll put them in in increments of at least six or twelve strands, usually twelve as a minimum.

Q. And in the example of your bank customer --

A. Then we would -- if it was a building where we had not had fiber-optic services before, we would be using four of those fibers ourselves for our first batch of electronics. We'd have four

maintenance spares, and then there would be four other fibers that would be available for another carrier.

Q. So, the first four for the electronics serve the customer? That was the intent?

A. Right, but increments of twelve, and twelve even being kind of on the low side. You know, 24 more typical.

Q. You mentioned in the rural areas you intend to deploy in skinnier increments.

A. Yes.

Q. How does that factor into what you see with the parallel provisioning? Is there a scarcity in the rural areas, or is that an area where demand is not taking what is being deployed?

A. No, I would say we've got, you know -- the shortages occur in rural areas as well as in urban areas.

I mean, if you look at the areas of Virginia where we first put fiber-optic cables in at the point in time we put them in we have a number that was 24 strands. If you go up in the Culpeper area, the central offices there -- so, the interoffice network what exists, because ten or 15 years ago when we were building it we put in smaller cables. As a result of that you can have scarcity in the rural

areas.

Q. When you were doing your buildouts you were talking about earlier, when you were talking ten years to construct a project, do you plan not only for your own use, but for an expectation that CLECs will take those other fiber-optic lines?

A. Well, really, when we plan, we don't get down to determining individual unique subgroups that somehow they all fit together to produce the end size, end product. I mean, basically, when we're sizing fiber-optic cables there's still a lot of engineering judgment, which is code word for a lot of guessing, relative to how big something is going to be. So, we are nowhere near as precise when we engineer and size something to say, this chunk is for wireless and this is for CLEC and this is for us, you know. Typically it's what's our best engineering judgment/guess as to how much of this stuff we're going to need over the next fifteen years and putting it in for that.

Q. In these rural areas that are served on the skinnier lines, does the communit's cry for high-speed access factor into the judgment of what would be deployed?

A. If you have any particular place where we're building -- if there are known expressions of

demand that have been conveyed to us that we've run into, those are always, you know, one of a number of factors of input that the engineer thinks about when they size new facilities and when they size fiber-optic facilities. So, if you've heard from, you know, 20 different potential customers that Jonesville, you know, in the extreme southwest tip of Virginia for whatever reason, you know, is going to be a new hotbed of communication needs, I mean, if those have been expressed and conveyed to Verizon, then the engineer who is sizing the facilities, when it's time to relieve Jonesville, certainly would take all that into account, and the end result would be they would build something bigger than if they hadn't had any of that input.

Q. Let me shift gears just for a minute here.

Your reply testimony mentions that I think it was OpenBand that suggested the rulings from Maine or Texas be applied. Are any of you-all familiar with the policies that either the Maine or Texas PUC require?

A. (Shockett) I'm familiar with what's required in Maine.

Q. Your reply -- is it that you see that

there's a problem with the rules they have adopted in Maine or is it simply that's not required for this proceeding?

A. That it's not required for this proceeding.

Q. All right.

Is there anything you know about in the rules in Maine that you would, should there come a time that this Commission would want to take a look at those -- that you would say, no, that's a bad idea, don't adopt those?

A. I'd have to look at it on an individual basis, but that ruling we had in Maine was definitely negotiated between Verizon and Maine, and, you know, it applies to Maine, so it is state-specific. And the additional items that we agreed to in Maine are not required for this proceeding, so, you know, again, I would have to see how it impacts the offering here.

Q. All right. Thank you.

MR. DOGGETT: No further questions, Your Honor.

HEARING EXAMINER: Thank you.

Mr. Mueller?

EXAMINATION

BY MR. MUELLER:

Q. Good afternoon, Ms. Shockett. I'd like to follow up on your answer to Mr. Doggett.

First, let me recall that when you were asked if there's any other check available to a CLEC on the most efficient route between two points for dark fiber you said, a field status survey is the only check in Virginia. You were careful to limit it to Virginia.

What's available outside of Virginia for a CLEC trying to secure the most efficient route from Verizon with regard to fiber?

A. (Shockett) Well, in some of our other states we do have something called cable documentation.

Q. Well, tell me about cable documentation, if you would.

A. Cable documentation is provided at the CLEC's request, which would provide the CLEC, for a fee, the information on the status of a particular route; how many of the fibers are there, how many are in use, how many are assigned to maintenance, how many are defective.

Q. So, if I were a CLEC and you told me today that a wire center map at street level detail of

dark fiber is available now in Virginia, I can augment that stick figure basic document that you describe with this cable documentation if I were somewhere other than in Virginia. Is that right?

A. Yes, if the cable documentation were available in that state.

Q. Now, you've negotiated with Maine for cable documentation?

A. Yes, we have.

Q. Okay. What other states have you agreed to provide cable documentation to?

A. We provided cable documentation in New Hampshire and in New Jersey on a very limited basis, and I'd have to check to see where else we provided it.

Q. What other checks are there in addition to cable documentation for the CLEC to secure the most efficient route for your existing dark fiber facilities?

A. Other than the cable documentation, I don't believe we have any other option.

Q. And I believe somebody testified on the panel -- and here I'll open it up to the whole panel -- a CLEC representative is not welcome to accompany someone on a field survey. Is that right?

A. The field survey is done by a Verizon technician, and it is an independent look at the records at the customer's -- well, whatever location it is that they're looking at.

Q. Okay. And cable plats are the only record I've heard of thus far. Tell me if there's any other record that the panel knows of that will provide the location of dark fiber, the available capacity and the routes in any given area.

Am I correct there?

A. (Albert) No, there really is no one set of records that will do all that.

Let me describe the two main sets of records for you. Maybe that will help.

They're -- you can think of the cable plats more as like engineering construction drawings that basically show the size of equipment facilities, where they're physically located, how they're spliced together and how they're connected together.

Now, at that point you would know that you've got, you know, 144 fibers that run into the basement of 600 East Main Street, but you wouldn't from the cable plats know if all of that 144 were working or if 30 of them were working.

So, the records, the inventory, of

complete fiber facilities, you know, that can be -- that are completely constructed between two end points, those records of how many of them are there, and are they working, or are they spare, that's what's contained in the operational support inventory and assignment system called TIRKs.

So, inventory of finished facilities was in the operation support system of TIRKs.

The actual engineering construction prints are the cable plats.

Q. And the cable plats also have unterminated dark fiber that is not available to CLECs. Is that correct?

A. Yes, anything that's in the process of being constructed, which is what unterminated is -- because once we terminate it, it's done. When it's terminated, it's a finished facility, it goes into the inventory, and it's done.

But if we're running a new fiber cable from the Gayton Road central office out to my house at Church Road, and if that cable only goes halfway, if it only goes two miles and doesn't get all the way to my house, those plats will show that that fiber cable goes two miles and then it stops in a manhole.

Q. Okay. Do CLECs have the usability of